line screening;

Fig. 3 shows the results of all L-esters tested on Colo205 cells (colonic cancer); and

Fig. 4 shows the results of all L-esters tested on BxPC3 cells (pancreatic cancer). --

On page 7, between lines 10 and 11, please insert:

-- DESCRIPTION OF VARIOUS AND PREFERRED EMBODIMENTS OF THE INVENTION –

On page 77, please delete line 1 and insert therefore:

-- WHAT IS CLAIMED IS: --

Amendments to the Claims:

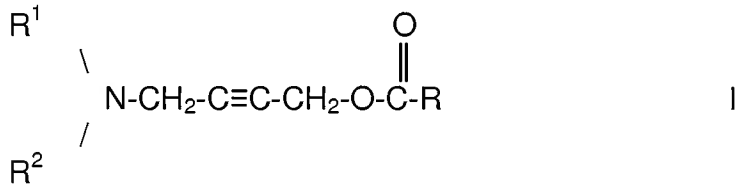
Please amend claims 1 to 12 and add claim 13 as set forth hereinafter.

Listing of Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims

1. (Currently Amended) 4-(N-substituted amino)-2-butynyl-1-esters represented by the following general formula I, their bis-(2-butynyl)diesters and pharmaceutically acceptable salts thereof,



I

wherein

R is a hydrogen atom; a straight-chained or branched, saturated or unsaturated aliphatic radical with 1-20 C-atoms which is unsubstituted or substituted one or more times by C_1-C_6-alkyl, C_1-C_6-alkoxy, halogen, epoxy, amino, mercapto, a phenyl ring which is unsubstituted or substituted one or more times by C_1-C_6-alkyl, C_1-C_6-alkoxy, hydroxy, epoxy, amino, mercapto or halogen; a cycloalkyl group with 4 to 7 atoms unsubstituted or substituted

one or more times by C_1-C_6-alkyl, C_1-C_6-alkoxy, hydroxy, epoxy, amino, mercapto or halogen,

R^1 and R^2 are joined to form a heterocyclic ring with 3 to 6 C-atoms, unsubstituted or substituted one or more times by C_1-C_6-alkyl, C_1-C_6-alkoxy, hydroxy, halogen, epoxy, amino, mercapto, whereby at least one C-atom can be replaced by 0, S or N,

or

R^1 and R^2 are the same or different a hydrogen atom, a straight-chained or branched, saturated or unsaturated aliphatic radical with 1-20 C-atoms, unsubstituted or substituted one or more times by C_1-C_6-alkyl, C_1-C_6-alkoxy, hydroxy, halogen, epoxy, amino~~,~~ or mercapto~~,~~.

2. (Previously Presented) 4-(N-substituted amino)-2-butynyl-1-esters according to claim 1,

wherein

R is a hydrogen atom, a straight-chained or branched alkyl group with 1-12 C-atoms, which can be substituted one or more times by C_1-C_6-alkyl; a phenyl ring which can be substituted one or more times by C_1-C_6-alkyl; a cyclo alkyl ring with 5-6 C-atoms which can be substituted one or more times by C_1-C_6-alkyl.

3. (Currently Amended) 4-(N-substituted amino)-2-butynyl-1-esters according to claim 1 ~~or 2~~,

wherein

R^1 and R^2 are the same alkyl group with 1-12 C-atoms, which can be straight-chained or branched and substituted by C_1-C_6-alkyl,

or

R^1 and R^2 are joined to form a heterocyclic ring with 4 to 6 C-atoms, whereby at

least one C-atom can be replaced by 0, S or N, and the ring can be substituted by C_1-C_6-alkyl.

4. (Currently Amended) 4-(N-substituted amino)-2-butynyl-1-esters according to ~~one of claims 1 to 3~~ claim 1,

wherein

R is a hydrogen atom, a straight-chained or branched alkyl group with 1-6 C-atoms, which can be substituted one or more times by C_1-C_6-alkyl; a phenyl ring which can be substituted one or more times by C_1-C_6-alkyl; a cyclo alkyl ring with 5-6 C-atoms which can be substituted one or more times by C_1-C_6-alkyl,

and

R^1 and R^2 are the same alkyl group with 1-6 C-atoms, which can be straight-chained or branched and substituted by C_1-C_6-alkyl,

or

R^1 and R^2 are joined to form a heterocyclic ring with 4 to 6 C-atoms, whereby at least one C-atom can be replaced by 0, S or N, and the ring can be substituted by C_1-C_6-alkyl.

5. (Currently Amended) 4-(N-substituted amino)-2-butynyl-1-esters according to claims 4,

wherein

R is H or alkyl ~~such as methyl, ethyl, propyl, butyl, pentyl, hexyl, phenyl, tertiary butyl and cyclohexyl~~

and

R^1 and R^2 are identically methyl, ethyl, propyl, butyl or phenyl; or form together with the N-atom a piperidino, pyrrolidino, morpholino, thiomorpholino, hexamethylene imino, piperazino and methyl piperazino ring.

6. (Currently Amended) 4-(N-substituted amino)-2-butynyl-1-esters according to ~~claims~~ claim 5,

wherein 4-(N-substituted amino)-2-butynyl-1-esters are selected from the group comprising

- [N-(4-morpholino-2-butynyl)] acetate
- [N-(4-piperidino-2-butynyl)] acetate
- [N-(4-(N-methyl piperazino-2-butynyl)] acetate
- [N-(4-thiomorpholino-2-butynyl)] acetate
- [N-(4-pyrrolidino-2-butynyl)] acetate
- [N-(4-hexamethylene imino-2-butynyl)] acetate
- [N-(4-morpholino-2-butynyl)] benzoate
- [N-(4-morpholino-2-butynyl)] formate
- [N-(4-diethylamino-2-butynyl)] acetate
- [N-(4-diphenylamino-2-butynyl)] acetate
- [N-(4-morpholino-2-butynyl)] propionate
- [N-(4-thiomorpholino-2-butynyl)] propionate
- [N-(4-morpholino-2-butynyl)] pivalate
- [N,N'-(4,4-piperazino-bis-2-butynyl)] diacetate and
- [N-(4-morpholino-2-butynyl)] cyclohexyl carboxylate.

7. (Currently Amended) Method for producing 4-(N-substituted amino)-2-butynyl-1-esters or a pharmaceutically acceptable salt according to ~~anyone of claims 1-6~~ claim 1 comprising

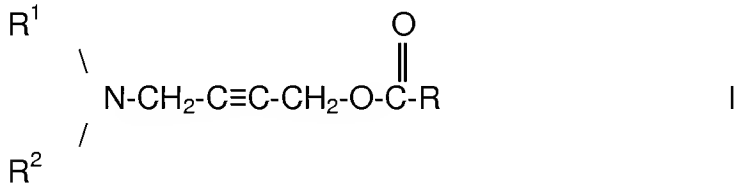
- a successive conversion of a propargyl alcohol in a propargyl ester by simple esterification,
- a conversion of the propargyl ester in N-(4-amino-2-butynyl) ester by Mannich condensation to give a compound of formula I and, ~~if desired~~ optionally,

converting a compound of formula I to a corresponding ~~pharmaceutically~~ pharmaceutical salt ~~by conventional means~~.

8. (Currently Amended) Method according to claim 7,
~~characterized in that,~~
wherein the Mannich condensation is performed in the presence of paraformaldehyd, an acid catalyst, Cu-salts and a solvent.

9. (Currently Amended) Pharmaceutical composition for use in therapy, comprising a compound according to ~~anyone of claims 1 to 6~~ claim 1, and a pharmaceutically-acceptable ~~carriers, adjuvants, vehicles and/or diluents~~ carrier, adjuvant, vehicle and/or diluent.

10. (Currently Amended) ~~Use of~~ Method of treating a cell proliferative disorder comprising
administering to a patient benefiting from such a treatment at least one ~~M4-(N-substituted-amino)-2-butynyl-1-esters~~ M4-(N-substituted amino)-2-butynyl-1-ester represented by ~~the following general~~ formula I, ~~their bis-(2-butynyl)diesters~~ its bis-(2-butynyl)diester and/ or a pharmaceutically acceptable ~~salts~~ salt thereof,



I

wherein

R is a hydrogen atom; a straight-chained or branched, saturated or unsaturated aliphatic radical with 1-20 C-atoms which is unsubstituted or substituted one

or more times by C_1-C_6-alkyl, C_1-C_6-alkoxy, ~~hydroxy,~~ halogen, epoxy, amino, mercapto, a phenyl ring which is unsubstituted or substituted one or more times by C_1-C_6-alkyl, C_1-C_6-alkoxy, hydroxy, epoxy, amino, mercapto or halogen; a cycloalkyl group with 4 to 7 atoms unsubstituted or substituted one or more times by C_1-C_6-alkyl, C_1-C_6-alkoxy, hydroxy, epoxy, amino, mercapto or halogen,

R^1 and R^2 are joined to form a heterocyclic ring with 3 to 6 C-atoms, unsubstituted or substituted one or more times by C_1-C_6-alkyl, C_1-C_6-alkoxy, hydroxy, halogen, epoxy, amino, mercapto, whereby at least one C-atom can be replaced by 0, S or N,

or

R^1 and ~~R_2~~ R^2 are the same or different a hydrogen atom, a straight-chained or branched, saturated or unsaturated aliphatic radical with 1-20 C-atoms, unsubstituted or substituted one or more times by C_1-C_6-alkyl, C_1-C_6-alkoxy, hydroxy, halogen, epoxy, amino, mercapto,

in a cell proliferative disorder treating effective amount

~~for manufacturing an agent for the treatment of a cell proliferative disorder~~.

11. (Currently Amended) ~~Use according to claim 10, characterized in that~~ The method of claim 10, wherein the cell proliferative disorder is a neoplasia.

12. (Currently Amended) ~~Use according to claim 10 or 11, characterized, in that,~~ ~~the neoplasia~~ The method of claim 11, wherein the neoplasia is selected from the group consisting of leukemias, lymphomas, sarcomas, carcinomas, neural cell

tumors, squamous cell carcinomas, germ cell tumors, undifferentiated tumors, seminomas, melanomas, neuroblastomas, mixed cell tumors, metastatic neoplasia and neoplasia due to pathogenic infections.

13. (New) 4-(N-substituted amino)-2-butynyl-1-esters according to claim 5, wherein R is methyl, ethyl, propyl, butyl, pentyl, hexyl, phenyl, tertiary butyl or cyclohexyl.

14. (New) Pharmaceutical composition for use in therapy, comprising a compound according to claim 3, and a pharmaceutically-acceptable carrier, adjuvant, vehicle and/or diluent.

15. (New) A kit for inhibiting abnormal cell growth comprising at least one of the esters of claim 1, bis-(2-butynyl) diesters or pharmaceutically acceptable salts thereof, and, in a separate container, information about using parts of the kit.